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2024 F-150 Police Responder

Specs

Key product specifications include vehicle dimensions and capacities, detailed powertrain information, transmission gear ratios and more.

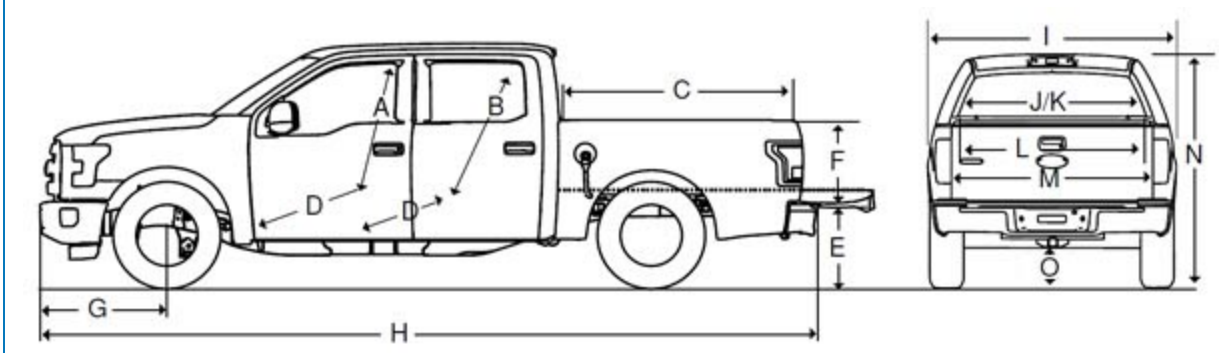
2024 F-150 Police Responder > Specs

Dimensions/Weights/Capacities

Fuel Tank Capacity
Interior Volume
Pickup Box Dimensions
SuperCrew Dimensions
Weight Ratings

2024 F-150 Police Responder > Specs > Dimensions/Weights/Capacities

SuperCrew Dimensions



Drive		4x4
Cargo Box (ft.)		5.5
Wheelbase (in.)		145.4
Code	Description (in.)	
A	Head Room (Front)	40.8
B	Head Room (Rear)	40.4
C	Inside Length(1) (at floor)	67.1
D	Leg Room (Front) (maximum)	43.9
	Leg Room (Rear)	43.6
E	Open Tailgate to Ground (Empty)(2)	34.1
F	Inside Height(1)	21.4
G	Front Overhang	37.4
H	Overall Length	232.0
I	Width (maximum) (excluding mirrors)	79.9
J	Shoulder Room (Front)	66.7

	Shoulder Room (Rear)	66.0
K	Hip Room (Front)	62.5
	Hip Room (Rear)	62.6
L	Width Between Wheelhouses[1]	50.6
M	Maximum Load Width[1] (at floor)	60.3
N	Cab Height (Empty)[2]	77.2
O	Ground Clearance	9.8

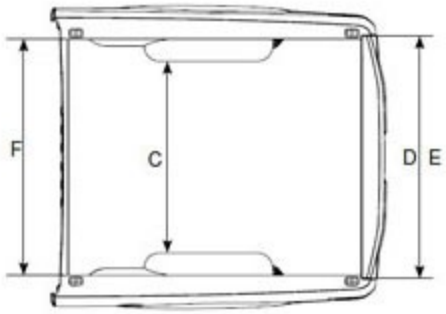
(1) Pickup box. Also refer to Pickup Box Dimensions.

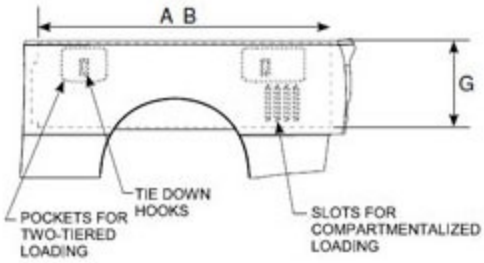
(2) The height data shown represents dimensions of a nominal vehicle with no options. Actual height may vary due to production tolerances.

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs > Dimensions/Weights/Capacities

Pickup Box Dimensions





Box Size (ft.)		5.5
Code	Description (in.)	
A	Cargo Box Inside Length @ Floor	67.1
B	Cargo Box Length @ Top	65.4
C	Cargo Width @ Wheelhouse	50.6
D	Rear Opening Width @ Floor	60.3
E	Rear Opening Width @ Top	60.3
F	Cargo Body Maximum Inside Width	65.2
G	Cargo Body Height with Molding	21.4
	Cargo Box Volume[1]	52.8

(1) Does not include allowances for wheelhouses.

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2024 F-150 Police Responder > Specs > Dimensions/Weights/Capacities

Interior Volume

Cab Position	Volume (cu. ft.)
	5.5-ft. box

Front Passenger	64.7
Rear Passenger	67.2
Total Passenger	131.9
Cargo Volume Behind First Row, Rear-seat Cushion Folded Up	50.9

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs > Dimensions/Weights/Capacities

Fuel Tank Capacity

Wheelbase (in.)	Location	Capacity (gallons)	
		Standard	Available
145.4	Midship	26.0	—

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs > Dimensions/Weights/Capacities

Weight Ratings

Cab Style/Drive/ WB (in.)	Engine	Max. GVWR (lbs.)	Max. Payload[1] (lbs.)	Max. Total ARC Weight[2] (lbs.)	Max. GAWR[3] (lbs.)		Base Curb Weight (lbs.)		
					Front	Rear	Front	Rear	Total
SuperCrew 4x4 145.4	3.5L EcoBoost	7,075	1,970	831	3,525	3,800	2,943	2,108	5,051

(1) Load rating represents maximum allowable weight of people, cargo and body equipment and is reduced by available equipment weight.

(2) OPT/ARC Weight is the maximum allowable weight for regular production options (OPT) and aftermarket equipment. Accessory Reserve Capacity (ARC) for models with standard equipment and the engine/transmission combination indicated.

(3) Gross Axle Weight Rating (GAWR) is determined by the rated capacity of the minimum component of the axle system (axle, computer-selected springs, wheels, tires) of a specific vehicle. Front and rear GAWRs will, in all cases, sum to a number equal to or greater than the GVWR for the particular vehicle. Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVWR.

NOTE: Refer to Standard Equipment for Standard Powertrain/Chassis Equipment Specifications.

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs

Powertrain

Automatic Transmission Specifications
Cooling System Specifications
Engine Specifications
Fuel System Data
Transfer Case Specifications

2024 F-150 Police Responder > Specs > Powertrain

Automatic Transmission Specifications

Make/Type	Ford 10-Speed Automatic Overdrive (10R80)

Engine	3.5L EcoBoost V6
Ratios (to 1):	
1st	4.70
2nd	2.99
3rd	2.15
4th	1.77
5th	1.52
6th	1.28
7th	1.00
8th	0.85
9th	0.69
10th	0.64
Reverse	4.87
Converter Size and Type (mm)	260 with turbine damper
Converter Stall Ratio	1.82:1
Lubricant Capacity (qts./liters)	13.7/13.0
Planetary	Simple (4)
Helical Gears	All
Oil Cooler	6-channel
Speed Sensor System	Yes, with four (4) internal speed sensors
Fully Electronic Shift Scheduling	Yes
Weight (lbs.; with Fluid)	231

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs > Powertrain

Cooling System Specifications

Engine	Radiator Usage	Frontal Area(1) (sq. cm.)	Core Size (mm)			Rows of Tubes	Fins Per dm	Cooling System Cap. (liters)	Fans	
			Height	Width	Core				Diameter (left/right)	No. of Blades (left/right)
3.5L EcoBoost V6	Standard	4,000	457.4	880	28	61	85	13.0	375/395	5/7

(1) Based on front face area of the radiator.

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs > Powertrain

Engine Specifications

Driveline Layout	Front Engine, 4x4

Engine Type	3.5L EcoBoost V6
Displacement (liters/cu. in.)	3.5/214
Horsepower @ rpm	400 @ 6,000
Torque (lb.-ft.) @ rpm	500 @ 3,100
Compression Ratio	10.5:1
Valvetrain	Ti-VCT DOHC
Valve Operation	Roller finger follower
Bore & Stroke (in.)	3.64 x 3.41
Main Bearings	4
Induction	Twin-turbocharged
Fuel System	Port Fuel Direct-Injection (PFDI) dual system
Fuel Requirement (octane)	87 (min.)

PERFORMANCE NOTE: Horsepower and torque are independent attributes and may not be achieved simultaneously.

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs > Powertrain

Fuel System Data

Sequential Electronic Fuel Injection	Port fuel/direct-injection (PFDI)
Fuel Pump	Single electric in-tank high-pressure
	In-tank electric high-pressure engine-mounted booster
Fuel Filter	In-tank lifetime
Air Cleaner	Dry element, replaceable

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs > Powertrain

Transfer Case Specifications

Shift Type	Electric Shift-on-the-Fly (ESOF)/2-Speed Automatic with Mechanical Locking Four-Wheel Drive (4WD)
Gear Type	2-speed planetary gears
Lubricant Capacity (liters)	1.5
Gear Ratio — High	1.00:1
Gear Ratio — Low	2.64:1
Case Material	Magnesium

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs

Chassis

Brake System Specifications
Frame Specifications
Front Axle Specifications
Rear Axle Specifications
Shock Absorber Specifications
Steering
Tire Specifications
Wheel Specifications

2024 F-150 Police Responder > Specs > Chassis

Brake System Specifications

	Standard
Description	Power vented disc with Anti-Lock Braking System (ABS), electronically controlled brake boost, Automatic Emergency Braking (AEB) and Reverse Brake Assist (RBA) **NOTE:** AEB/RBA includes one-touch temporary disable switch for Law Enforcement use.
Front	
Rotor Material	Nitro Tough Iron
Rotor Size (dia. x thickness) (mm)	350 x 34
Swept Area (sq. mm)	51,547
Caliper Description	Sliding-caliper, dual-piston
Caliper Piston Dia. (x2; mm)	51
Rear	
Rotor Material	Nitro Tough Iron
Rotor Size (dia. x thickness) (mm)	350 x 24
Caliper Description	Sliding-caliper, single-piston with electric integrated parking brake (eIPB)
Caliper Piston Dia. (mm)	54/2.13
Swept Area (sq. mm)	42,997
Electric Parking Brake Rating (kN)	25.5

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs > Chassis

Frame Specifications

Model	Wheelbase (in.)	No. of Crossmembers	Maximum Side Rail Section (in.)	Section Modulus (cu. in.)	Yield Strength (psi)
SuperCrew 4x4	145.4	8	9.06 x 3.58 x .1 (HD)	5.25	49,300

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs > Chassis

Front Axle Specifications

Series/Model		F-150 Police Responder 4x4
Type		Long-spindle double-wishbone, coil-over-shock independent front suspension
Gross Axle Weight Rating (GAWR) (lbs.)		3,525
Upper Control Arm	Material	Stamped steel
Lower Control Arm	Material	Stamped steel
Spring	Type	Coil-over-shock, computer-selected
Ball Joints		Lubed-for-life
Spindle	Material	Cast-aluminum body with forged steel stem
Wheel Bearings	Type	Self-retained tapered roller (GEN II cartridge)

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs > Chassis

Rear Axle Specifications

Series/Model		F-150 Police Responder 4x4
Gross Axle Weight Rating (GAWR) (lbs.)		3,800
Make		Standard/electronic-locking
Axle Ratio (:1)		3.31
Ring Gear	Pitch Diameter (in.)	9.75HD
Housing	Type	Cast center
	Cover Attachment	Bolted
	Cover Seal Method	Gasket
Lubricant Capacity (pts.)		5.5-5.65
Wheel Bearings	Type	Straight roller
Gears	Type	Hypoid
	Material	Alloy steel
Pinion	Mounting	Overhung
Differential	Type	2-pinion
	Bearings	Tapered roller

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs > Chassis

Shock Absorber Specifications

Usage	Front			Rear		
	No. Used	Piston Dia.	Type	No. Used	Piston Dia.	Type

Standard	2	45 mm/1.77 in.	Monotube gas-pressurized	2	45 mm/1.77 in.	Twin-tube gas-pressurized

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs > Chassis

Steering

Cab	Wheelbase (in.)	Rack-and-Pinion Power Steering[1]		Turning Diameter (ft.) Curb-to-Curb
		Rack Speed (mm per Revolution)	Vehicle Steering Ratio	
SuperCrew	145.4	54.5	17.4:1	47.8

(1) All gears include nibble damper.

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs > Chassis

Tire Specifications

Size	Rim Width (in.)	Section Width (in.)	Static Loaded Radius (in.)
LT265/70R18 (A/T)	8.5	11.41	15.14

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs > Chassis

Wheel Specifications

Wheel Type	Wheel Size (in.)	Inset (in./mm)	No. of Studs	Bolt Circle (in./mm)	Maximum Wheel Capacity Load Front/Rear (lbs.)
Heavy-duty aluminum, silver-painted	18 x 8.5	1.73/44	6	5.3/135	2,100/2,400
Steel, black-painted	18 x 8.5	1.73/44	6	5.3/135	2,025/2,270

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs

Special Applications

Completed Vehicle Weight

Electrical Connections

Front-End Wheel Alignment and Headlamp Aim

Warranties

2024 F-150 Police Responder > Specs > Special Applications

Completed Vehicle Weight

The weight of the completed vehicle with equipment installed (and second unit body, if applicable) must not exceed the Front GAWR, Rear GAWR or GVWR established by Ford. If sufficient weight is added such that the completed vehicle with a driver and more than one passenger would exceed Front GAWR, Rear GAWR or GVWR, it is the responsibility of the equipment installer to notify the owner of the appropriate use restrictions (i.e., that the user should limit occupancy of the vehicle to the driver and one passenger while the equipment is installed). The addition of ballast weight, placed rearward of the rear axle, may be required to prevent front-end overloading or exceeding Front GAWR. If required, the ballast weight must be securely attached to the vehicle. For Ford completed vehicles of 10,000 lbs. GVWR or less, the weight of permanently attached equipment must not exceed the Total Accessory Reserve Capacity (TARC) as specified on the Safety Compliance Certification Label. Exceeding TARC will require recertification.

2024 F-150 Police Responder > Specs > Special Applications

Front-End Wheel Alignment and Headlamp Aim

Front-end wheel alignment (toe) and headlamp aim may require adjustment after installation of equipment, and is the responsibility of the equipment installer. Failure to reset front wheel alignment may cause premature, uneven tire wear. If required, reset to chassis manufacturer's specifications found in the Ford Shop Manual.

2024 F-150 Police Responder > Specs > Special Applications

Electrical Connections

Installation of any inductive load devices (i.e., electric motors, electric clutches for clutch pumps, etc.) MUST NOT be connected to OEM wiring or fuse panels. Power for such devices should be taken directly from the battery or starter motor relay power terminal. Control of these devices should be achieved via relays. No direct current path should exist between OEM wiring and the installed load that is not filtered by the battery. These recommendations are intended to reduce or eliminate any induced reverse voltage into the OEM circuitry.

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2024 F-150 Police Responder > Specs

Electrical

250 Amperes Alternator
Alternator Specifications
Battery Applications
Cold Weather Recommendations
Light Specifications and Usage
Standard Lighting/Reflector Equipment
Trailer Towing Wiring Harness

2024 F-150 Police Responder > Specs > Electrical

Alternator Specifications

Output (amperes)[1]	250
Output (watts)	3,375

(1) Actual output is temperature- and application-dependent.

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs > Electrical > Alternator Performance Curves

250 Amperes Alternator

Engine	Pulley Ratio	Model Application
3.5L EcoBoost V6	2.67:1	F-150 Police Responder

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs > Electrical

Battery Applications

Ampere-Hour Rating	80
Cold-Cranking Amps at 0°F	800
3.5L EcoBoost V6	Standard[1]

(1) Absorbent Glass Mat (AGM) battery.

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs > Electrical

Cold Weather Recommendations

Minimum Temperature	Equipment	
	HD Battery	Engine Block Heater
0° F	Suggested	Not Needed
-10° F	Recommended	Suggested

-20° F	Recommended	Recommended
Below -20° F	Strongly Recommended	Strongly Recommended

DEFINITIONS

Suggested: Helpful, but not needed.

Recommended: Could improve reliability in less-than-ideal conditions.

Strongly Recommended: Will give definite improvement over the standard components.

HD Battery: Higher-capacity battery available. (Usage varies by model.)

Engine Block Heater: Available equipment for all engines. (Usage and heater capacity vary with engine requirements.)

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs > Electrical

Standard Lighting/Reflector Equipment

Light Reflector	Application
Headlamps (LED)	All Series
Parking Lights	All Series — integral with turn signals
Front/Rear Turn Signals	All Series
Front Side Marker Lights	All Series
Front Side Reflectors	All Series
Rear Side Reflectors	All Series
Rear Side Marker Lights	All Series — integral with taillamps
License Plate Lights	All Series
Two Combination Taillamps with Integral Stop, Turn Signal and Backup Lamps and Reflective Surface	All Series
Rear Reflectors	All Series
Front Daytime Running Lamps	All Vehicles Registered in Canada

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs > Electrical

Light Specifications and Usage

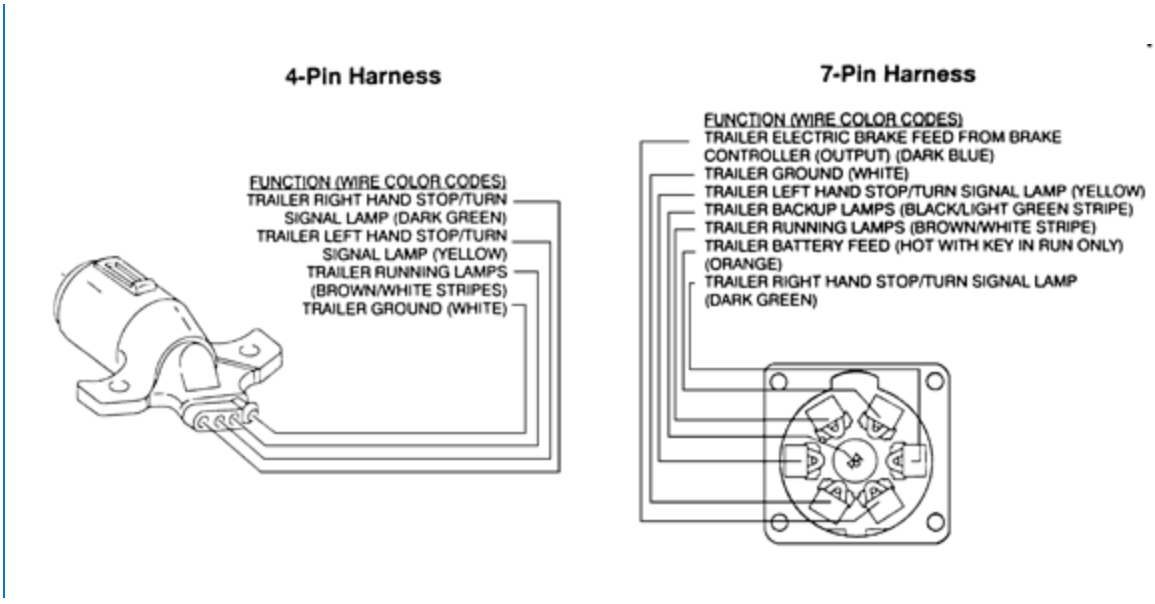
Lamp	Code	Description	Usage
Cab Marker — (five lights) Amber	STD	Torpedo, Hella	All Model Series
Daytime Running Lamps	STD	LED, Non-Serviceable	All Vehicles Registered in Canada
Headlamps	STD	LED, Non-Serviceable	All Vehicles Registered in U.S. and Canada

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

2024 F-150 Police Responder > Specs > Electrical

Trailer Towing Wiring Harness

Circuit Number	Circuit Description	Color Code
RAT08	Ground	White
CAT17	Parking Lamps	Brown
CAT14	Trailer Battery Feed	Orange
CAT19	To Electric Brakes	Dark Blue
CAT09	RH Turn Signal and Stop Lamps	Dark Green
CAT06	LH Turn Signal and Stop Lamps	Yellow
CAT03/CAT16	Trailer Backup Lamps	Gray with Brown Stripe
CBP30	Front Brake Controller Running Lamp Feed/Park Lamp Feed	Yellow with Blue Stripe
CBP40	Rear Brake Controller Running Lamp Feed/Park Lamp Feed	Yellow with Green Stripe
CLS30	Brake Controller Running Lamp Feed/Park Lamp Feed	Violet with White Stripe
CCB08	Vehicle Stop Lamps	Violet with White Stripe
SBB18/SBB17	B+ to Electric Brake Controller	Yellow with Red Stripe


4-Pin Harness
FUNCTION (WIRE COLOR CODES)
TRAILER RIGHT HAND STOP/TURN SIGNAL LAMP (DARK GREEN)
TRAILER LEFT HAND STOP/TURN SIGNAL LAMP (YELLOW)
TRAILER RUNNING LAMPS (BROWN/WHITE STRIPES)
TRAILER GROUND (WHITE)
7-Pin Harness
FUNCTION (WIRE COLOR CODES)
TRAILER ELECTRIC BRAKE FEED FROM BRAKE CONTROLLER (OUTPUT) (DARK BLUE)
TRAILER GROUND (WHITE)
TRAILER LEFT HAND STOP/TURN SIGNAL LAMP (YELLOW)
TRAILER BACKUP LAMPS (BLACK/LIGHT GREEN STRIPE)
TRAILER RUNNING LAMPS (BROWN/WHITE STRIPE)
TRAILER BATTERY FEED (HOT WITH KEY IN RUN ONLY) (ORANGE)
TRAILER RIGHT HAND STOP/TURN SIGNAL LAMP (DARK GREEN)

NOTE: Specifications and descriptions contained within are based upon the most current information available at the time of release. Content subject to change.

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